



~~3~~ 52. A DNA construct as defined in claim ~~51~~, wherein said sequence is derived from *Humicola insolens*.--

~~4~~ 53. A DNA construct encoding an endoglucanase enzyme, wherein said construct has a sequence selected from the group consisting of:

- (a) the sequence of SEQ ID NO:3; and
- (b) a sequence which hybridizes to the sequence of SEQ ID NO:3 at 40°C in 20% formamide-50 mM sodium phosphate pH 6.8.--

~~5~~ 54. A DNA construct as defined in claim ~~53~~, wherein said sequence is derived from *Fusarium*.--

~~6~~ 55. A DNA construct as defined in claim ~~54~~, wherein said sequence is derived from *Fusarium oxysporum*.--

~~7~~ 56. A DNA construct encoding an endoglucanase enzyme, wherein said construct comprises a sequence from which a polymerase chain reaction (PCR) fragment may be amplified using a set of sense and antisense oligonucleotide primers selected from the group consisting of:

- (a) sense primer SEQ ID NO:17 and antisense primer SEQ ID NO:21;
- (b) sense primer SEQ ID NO:18 and antisense primer SEQ ID NO:22;
- (c) sense primer SEQ ID NO:17 and antisense primer SEQ ID NO:23;
- (d) sense primer SEQ ID NO:18 and antisense primer SEQ ID NO:24;
- (e) sense primer SEQ ID NO:19 and antisense primer SEQ ID NO:23; and
- (f) sense primer SEQ ID NO:20 and antisense primer SEQ ID NO:24.--

~~8~~ 57. A DNA construct as defined in claim ~~56~~, wherein the PCR fragment amplified using set (e) or (f) has a size of at least 159 base pairs. --

~~9~~ 58. A DNA construct as defined in claim ~~56~~, wherein the PCR fragment amplified using set (c) or (d) has a size of at least 510 base pairs.--

~~10~~
~~60~~. A DNA construct as defined in claim ~~56~~⁷, wherein the PCR fragment amplified using set (a) or (b) has a size of at least 288 base pairs--

~~11~~
~~61~~. A DNA construct as defined in claim ~~56~~⁷, wherein said sequence is derived from a genus selected from the group consisting of *Humicola*, *Trichoderma*, *Myceliophthora*, *Phanerochaete*, *Schizophyllum*, *Penicillium*, *Aspergillus*, and *Geotricum*--

~~12~~
~~62~~. A vector comprising a DNA construct as defined in claim ~~50~~¹--

~~13~~
~~63~~. A host cell transformed with a vector as defined in claim ~~62~~¹²--

~~14~~
~~64~~. A method for producing an endoglucanase enzyme, said method comprising: (a) culturing a cell as defined in claim ~~63~~¹³, under conditions suitable for expression of said construct, and (b) recovering the enzyme from the culture.--

~~15~~
~~65~~. A vector comprising a DNA construct as defined in claim ~~53~~⁴--

~~16~~
~~66~~. A host cell transformed with a vector as defined in claim ~~65~~¹⁵--

~~17~~
~~67~~. A method for producing an endoglucanase enzyme, said method comprising: (a) culturing a cell as defined in claim ~~66~~¹⁶, under conditions suitable for expression of said construct, and (b) recovering the enzyme from the culture.--

~~18~~
~~68~~. A vector comprising a DNA construct as defined in claim ~~56~~⁷--

~~19~~
~~69~~. A host cell transformed with a vector as defined in claim ~~68~~¹⁸--

~~20~~
~~70~~. A method for producing an endoglucanase enzyme, said method comprising: (a) culturing a cell as defined in claim ~~69~~¹⁹, under conditions suitable for expression of said construct, and (b) recovering the enzyme from the culture.--